Criteria Used by Jones & Stokes Associates to Determine if a Special-Status Species Potentially May be Affected by CALFED Actions in Preliminary Conservation Strategy Species Lists for the Sacramento River, San Joaquin River, and Bay Regions

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Determinations if a species would potentially be affected by CALFED actions is based on four types of information:

- descriptions of programmatic actions proposed in CALFED storage, conveyance, and common program documents;
- occurrence or potential for occurrence of each species in one or more CALFED regions;
- habitat types with which each species is associated; and
- habitat use and mobility of each species.

CALFED PROGRAM ASSUMPTIONS

Storage

Sacramento River Region

- 1. All proposed reservoir enlargement or off-stream reservoir sites are located in watershed regions and, therefore, are not included in the analysis.
- 2. Conveyance infrastructure to serve off-stream reservoir sites is located inside the Colusa Basin Ecological Zone and could include enlargement of existing Tehama-Colusa Canal, a 21 mile extension of the canal, and an intertie to Chico Landing.
- 3. Groundwater storage sites could be located anywhere in basins adjacent to the Sacramento River would potentially affect agricultural and grassland habitat areas.

San Joaquin River Region

1. The proposed West San Joaquin Valley Reservoir Project could be located anywhere in the foothills of the West San Joaquin Basin Ecological Zone and would include conveyance infrastructure from the California Aqueduct.

- 2. The proposed Montgomery Reservoir could be located anywhere in the East San Joaquin Basin Ecological Zone and would include expansion of the North Side Canal.
- 3. The proposed enlargement of Los Vaqueros Reservoir could include about 7,000 acres of habitat in the Kellogg Creek Watershed of the West San Joaquin Basin Ecological Zone.
- 4. Groundwater storage sites could be located anywhere in basins adjacent to the San Joaquin River would potentially affect agricultural and grassland habitat areas.

Water Operations

1. Descriptions of reservoir and water transfer operations are insufficient to determine potential effects on <u>terrestrial</u> biological resources.

Conveyance

1. Conveyance Program actions will not occur outside the Delta Region and, therefore, will not affect biological resources in other CALFED regions.

Levee System Integrity Program

1. Levee System Integrity Program actions will not occur outside the Delta Region and, therefore, will not affect biological resources in other CALFED regions.

Water Use Efficiency Program

1. Program action descriptions are insufficient to determine potential effects on Conservation Strategy species.

Water Quality Program

- 1. Generally, an increase in water quality will have an overall environmental benefit. However, information necessary to determine if a species would be affected by improved water quality is not (or not readily), available; therefore, effects of improved water quality were not included in the analysis.
- 2. Potential effects of eliminating, relocating, or consolidating water control infrastructure (e.g., intakes), and removal of in-channel contaminants were considered in the analysis.

Ecosystem Restoration Program

1. Within the Sacramento and San Joaquin River Regions, ERP actions are assumed to

potentially affect aquatic, riverine, wetland (permanent and seasonal), grassland, and agricultural habitats major water courses and historical overflow basins.

2. Within the Bay Region, ERP actions are assumed to potentially affect tidal and non-tidal aquatic, wetland (permanent and seasonal), grassland, and agricultural habitats along the margins and adjacent lowlands of Suisun and San Pablo Bays.

"MAY AFFECT" DETERMINATION

CALFED actions were considered to potentially affect Conservation Strategy species if:

- an action(s) could adversely or beneficially affect a species habitat(s);
- an action(s) could have a direct adverse or beneficial affect on individuals within a population (e.g., transplanting species or reduction of illegal harvest);
- the range and habitat of a species includes locations potentially affected by actions; and
- actions could affect a substantial amount of habitat area used by highly mobile species (e.g., ferruginous hawk foraging habitat areas).